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District Overview

UCHICAGO Consortium
ON SCHOOL RESEARCH

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The Educational Attainment of Chicago Public Schools Students 2015: A Focus on Four-Year College Degrees



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To&Through Project aims to provide educators, families, and policymakers with the actionable research, data, and training they need to increase the number of students who make it to and through college. The project seeks to make Chicago the Attainment City—a place where every ninth-grader who wants to goes on to earn a college degree. More information is available at toandthrough.uchicago.edu

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The Educational Attainment of Chicago Public Schools Students

Introduction

The Chicago Public Schools' (CPS) vision is that every student graduates from high school prepared for success in college, career, and life.¹ To help the city reach that goal, the To&Through Project is providing data that track the progress of students in Chicago and identify where students are falling off the path to college degree attainment. This report provides a summary of the current state of the educational attainment of CPS students, updating the numbers released in the 2014 brief, *The Educational Attainment of Chicago Public School Students*.² It provides the big picture of what is happening in the district as context for a series of reports that provide information on individual high schools. The school-level reports—one summarizing attainment rates and preparation levels³ and the other on college enrollment⁴—will be released later in 2016.⁵

2015 Bachelor's Degree Attainment Index

As of 2015, we estimate that 18 percent of CPS ninth-graders will obtain a four-year-college degree within 10 years of starting high school (the Bachelor's Degree Attainment Index or Bachelor's DAI; see **Table 1**), compared to an estimate of 17 percent in the 2014 brief. We estimate 16 percent of students will take the straightforward path of graduating high school in four years, enrolling immediately in a four-year college, and earning a four-year college degree within six years of starting college (the Direct Bachelor's Degree Attainment Index

or Direct Bachelor's DAI). The University of Chicago Consortium on School Research (UChicago Consortium) developed these two metrics to estimate students' progression to and through college. The Bachelor's DAI is a better estimate of the total proportion of CPS ninth-graders who will earn a four-year degree within 10 years of beginning high school because it accounts for students who first enroll in a community college or delay entry into college before earning a four-year degree.⁶

The Bachelor's DAI is not substantially higher than the Direct Bachelor's DAI because few CPS graduates who delay college entry or first enroll in a two-year college go on to earn a four-year degree. When we examine CPS students' outcomes six years after graduating high school, just 8 percent of students who immediately enrolled in a two-year college and just 4 percent of students who did not immediately enroll in college have earned a four-year college degree, compared to 50 percent of students who enrolled in a four-year college immediately after high school graduation.⁷ The National Student Clearinghouse (NSC) found that, nationally, 9 percent of students who begin at a public two-year college before age 20 attain a four-year degree within six years, slightly higher than the rate for CPS graduates.⁸ There are likely many differences between students with these different college enrollment patterns, and not all students may have intended to earn a four-year degree. However, given that 76 percent of CPS seniors plan to attain a four-year college degree, many students are taking a path with a low probability of reaching their aspirations.

1 Chicago Public Schools 2013-18 Action Plan (2013).

2 Healey, Nagaoka, & Michelman (2014).

3 UChicago Consortium (2016).

4 Kelley-Kemple & Moeller (2016).

5 The school-level reports will be available at toandthrough.uchicago.edu.

6 Details on how the Bachelor's DAI is calculated are provided in the online appendix at: <http://consortium.uchicago.edu/publications/educational-attainment-chicago-public-schools-students-2015-focus-four-year-college>.

7 In this report, we allow students six years from high school graduation to earn a bachelor's degree. This allows us to make comparisons to national college graduation rates, which are typically six-year rates. If we allowed students a longer time period to earn a degree, the graduation rates would increase. In 2015, the Current Population Survey estimated that 36 percent of 25- to 29-year-olds had a four-year degree or higher (National Center for Education Statistics, 2015b).

8 Shapiro, Dundar, Wakhungu, Yuan, Nathan, & Hwang (2016).

TABLE 1
Educational Attainment Milestones in Chicago with National Comparisons⁹

	High School Graduation Rate		Four-Year College Enrollment Rate		Four-Year College Graduation Rate (six-year rate)		Direct Bachelor's Degree Attainment Index	Bachelor's Degree Attainment Index
2015 CPS Index	74% (2015 HS graduates)	X	42% (2014 HS graduates)	X	50% (2008 college enrollees)	=	16% (2015)	18% (2015)
2015 U.S. Index	82% (2014 HS graduates)	X	44% (2014 HS graduates)	X	60% (2008 college enrollees)	=	22% (2015)	Not Available

Note: The most recent data available for each rate is shown.

Nationally, the most comparable data available suggest that the Direct Bachelor's DAI increased from 18 percent in 2013 to 22 percent in 2015 for public high school students across the country. We are unable to calculate a national Bachelor's DAI because comparable data on bachelor's degree completion rates for students who delay college entry are not available.

The 2015 CPS Direct Bachelor's DAI is 6 percentage points behind the nation, but the district serves a much more disadvantaged population. The gap in the Direct Bachelor's DAI occurs primarily because of differences between CPS and national high school and college graduation rates. Specifically, the CPS high school graduation rate is 8 percentage points lower than the national rate (74 percent for CPS versus 82 percent for the nation), and the four-year college graduation rate for CPS graduates who enroll in a four-year college is 10 percentage points lower than the national rate (50 percent for CPS versus 60 percent for the nation). The four-year college enrollment rate among CPS graduates (42 percent) is only 2 percentage points lower than the national rate (44 percent).

Key Milestones

Improvements in the proportion of ninth-graders who are estimated to earn a four-year college degree could occur because of improvements in any of the three key milestones along the way: High school graduation, four-year college enrollment, and college graduation.

High School Graduation. It is rare for students who do not complete high school to eventually obtain a four-year college degree; improving high school graduation rates is the first step toward improving college degree attainment rates. High school graduation rates have improved considerably in Chicago, and this is one reason the Direct Bachelor's DAI has improved. The 2015 CPS four-year high school graduation rate is 74 percent.¹⁰ This represents an increase of 17 percentage points since 2006 (see **Figure 1**).¹¹ Nationally, the public high school graduation rate increased from 73 percent in 2006 to 82 percent in 2014.¹² For low-income students nationally, the 2014 high school graduation rate was 75 percent.¹³ So while high school graduation rates have been increasing across

⁹ The numbers provided in this brief may differ from other publicly available sources; an explanation of the rates used in this brief is available online at: <http://consortium.uchicago.edu/publications/educational-attainment-chicago-public-schools-students-2015-focus-four-year-college>.

¹⁰ The high school graduation rate calculated by UChicago Consortium differs from that produced by CPS. For an explanation of the reasons for the differences see: <http://consortium.uchicago.edu/publications/educational-attainment-chicago-public-schools-students-2015-focus-four-year-college>.

¹¹ See Allensworth, Healey, Gwynne, & Crespin (2016) for an analysis of the factors that account for the increases in high school graduation rates.

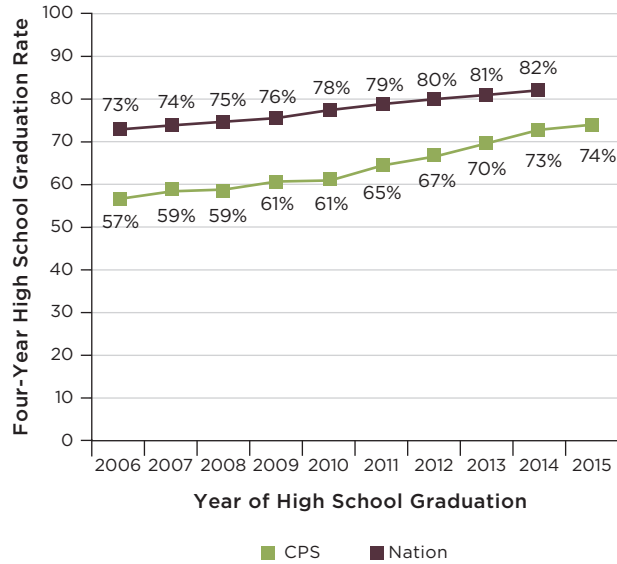
¹² The methodology changes between 2010 and 2011 (previously averaged freshman graduation rate, now adjusted cohort graduation rate). Both rates are available for 2011-2013; the cohort rate is 1 percentage point lower than the averaged freshman graduation rate in those years. National Center for Education Statistics (2016a); National Center for Education Statistics (2016b).

¹³ National Center for Education Statistics (2016a).

FIGURE 1

The 2015 Four-Year High School Graduation Rate for CPS is 74 Percent—an Increase of 17 Percentage Points Since 2006

High School Graduation Rates, for CPS and the Nation



the country, CPS has been outpacing the improvements observed nationally and its current rate is similar to the national rate for low-income students.

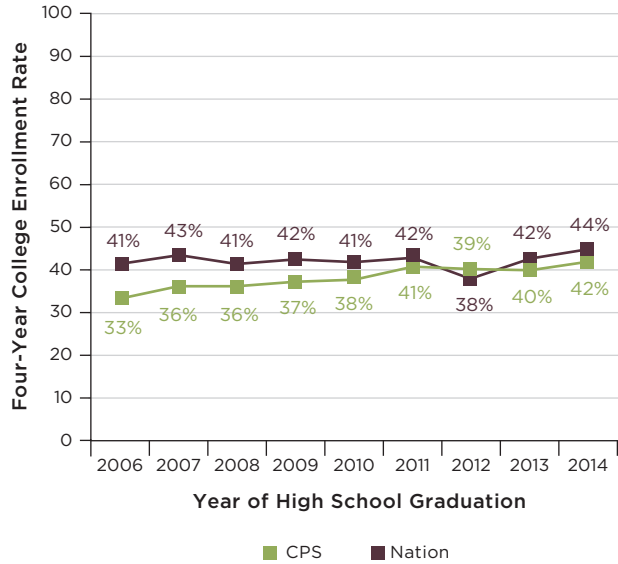
It is likely that CPS graduation rates will continue to improve for the next several years. The CPS freshman on-track rate provides a good estimate of the graduation rate three years later,¹⁴ and rising high school graduation rates have been keeping pace with increases in freshman on-track. The 2015 freshman on-track rate is 85 percent, therefore, we anticipate the high school graduation rate will continue to rise in the coming years.

The increases in high school graduation rates have not come at the expense of academic achievement; CPS graduates in recent years have higher achievement than graduates in prior years. The average ACT score increased from 17.6 for the class of 2006 to 18.5 for the class of 2014. This increase occurred while nearly 5,800 additional students were taking the ACT because more students stayed in school until the spring of their junior year. The proportion of graduates scoring at least a 21 on the ACT also increased from 23 percent in 2006 to 30

FIGURE 2

The 2014 Four-Year College Enrollment Rate for CPS is Slightly Lower Than the National Rate

Enrollment Rates at Four-Year Colleges Among High School Graduates, CPS and the Nation



percent in 2014. There has also been an increase in the proportion of graduates earning a 3.0 GPA or better, from 21 percent in 2006 to 29 percent in 2014. However, the changes in GPA should be interpreted with some caution, as course grades are not available for students enrolled in charter schools, who now constitute 17 percent of CPS graduates. The ACT scores, however, are available for all students, including charter school students.

College Enrollment. The 2014 four-year college enrollment rate among CPS high school graduates is 42 percent. As shown in **Figure 2**, this is up from 33 percent in 2006. In addition, 20 percent of 2014 CPS graduates enrolled in a two-year college, bringing the 2014 combined college enrollment rate to 62 percent. The national college enrollment rate has remained relatively constant during this time period, and was 44 percent for four-year colleges and 68 percent for two- and four-year colleges combined in 2014.¹⁵ For low-income students, the national two-year and four-year combined college enrollment rate increased by seven percentage

¹⁴ Allensworth & Easton (2005).

¹⁵ The national college enrollment rates include GED recipients in

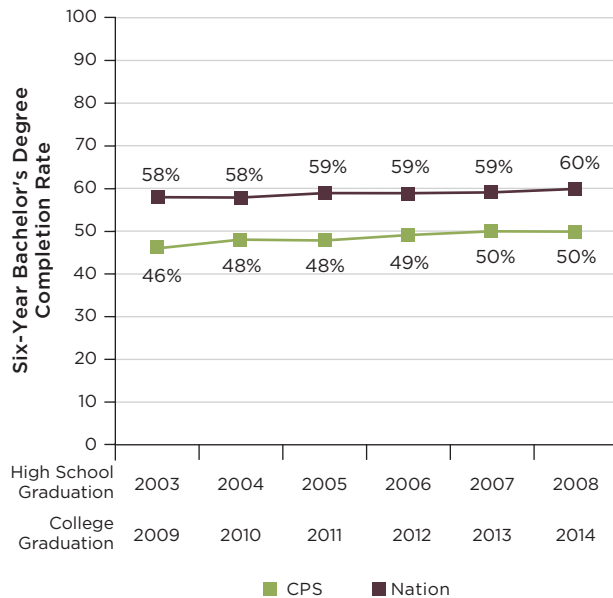
the denominator (the CPS rates only include graduates of regular high schools). National Center for Education Statistics (2015d).

points between 2006 and 2014 (from 51 percent to 58 percent).¹⁶ The 2014 CPS four-year college enrollment rate is 2 percentage points lower than the 2014 national rate and its two- and four-year college enrollment rate is 4 percentage points higher than the national rate for low-income students. Because the CPS high school graduation rate has also increased during this time, the increase in the four-year college enrollment rate translates into nearly 3,500 more CPS graduates enrolling in 2014, compared to 2006.

College Graduation. The 2014 six-year graduation rate for students who enrolled at four-year colleges for CPS graduates is 50 percent—a 4 percentage point increase since 2009 (see Figure 3). This increase reflects 1,100 more four-year college graduates in 2014 versus 2009. Nationally, this rate has increased from 58 percent in 2009 to 60 percent in 2014.¹⁷

FIGURE 3
Half of CPS Students Who Enroll in a Four-Year College Graduate within Six Years

Six-Year Bachelor's Degree Completion Rates Among Four-Year College Enrollees, CPS and the Nation



¹⁶ National Center for Education Statistics (2015c).
¹⁷ National Center for Education Statistics (2015a). The national rates are based on students who are enrolled full-time and only count degrees earned from the first college that the student attended, while the CPS rates include students who are enrolled part-time and count degrees earned from any four-year institution. National college graduation rates for low-income students are not available.

High School Graduation and College Enrollment Rates by School Type

The district has seen increases in high school graduation and four-year college enrollment rates since 2006, but the patterns have varied across different types of schools.¹⁸ High school enrollment patterns across school types have also shifted during this time (see Table 2). There has been a substantial increase in the number of charter high schools in the district, so that charter schools now produce a much larger share of all graduates; 17 percent of all 2014 CPS graduates versus just 2 percent of 2006 graduates. The number of graduates from selective enrollment and all other schools (such as neighborhood, career, and military academies) has also grown (from 2,031 to 2,805 for selective enrollment schools and from 13,570 to 14,163 for all other schools). The share of graduates attending selective

TABLE 2
The Proportion and Number of Graduates from Charter Schools Increased Substantially from 2006 to 2014

	Proportion of Graduates (Number of Graduates)		Number of Schools with Graduates	
	Graduating Class		Graduating Class	
	2006	2014	2006	2014
Selective Enrollment Schools	13% (2,031)	14% (2,805)	7	9
Charter Schools	2% (355)	17% (3,599)	7	38
All Other Schools	85% (13,570)	69% (14,163)	72	81
Total for CPS	100% (15,956)	100% (20,567)	86	128

Note: The "All Other Schools" category does not include alternative schools or special education schools.

¹⁸ There is also a lot of variation in these trends among schools of the same type. High school graduation, college enrollment, and college graduation rates (when available) for individual high schools can be found in the school-level reports at toandthrough.uchicago.edu.

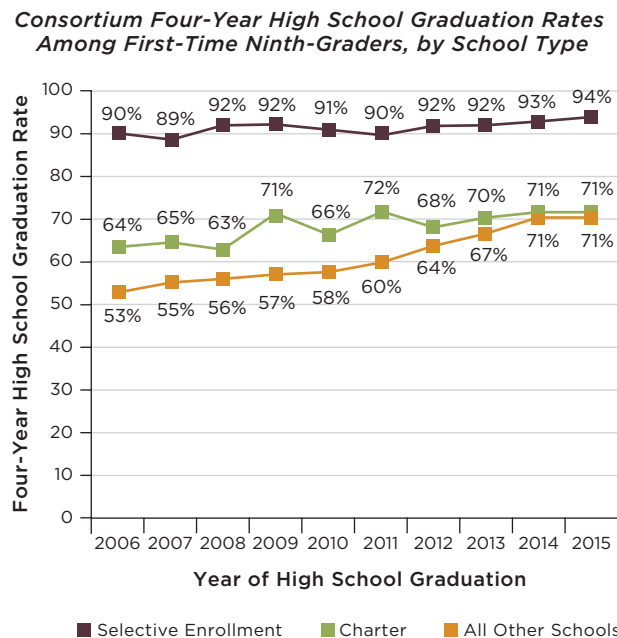
enrollment schools is about the same because these increases have kept pace with the increase in the overall number of graduates. Because the size of graduating classes in charter schools has increased so much, non-charter, non-selective enrollment high school graduates now constitute a much smaller share of CPS graduates (from 85 percent in 2006 to 69 percent in 2014) even though there were nearly 600 more graduates of these schools in 2014 than in 2006.¹⁹

The largest increase in high school graduation rates has been among non-charter, non-selective enrollment schools (such as neighborhood, career, and military academies). Selective enrollment and charter schools have seen modest increases in their high school graduation rates (see Figure 4). For a number of years, charter high schools had higher graduation rates than other non-selective enrollment schools, but that gap has closed over time. In 2014, the graduation rates at non-charter,

non-selective enrollment schools caught up to charter schools so that both have high school graduation rates of 71 percent.

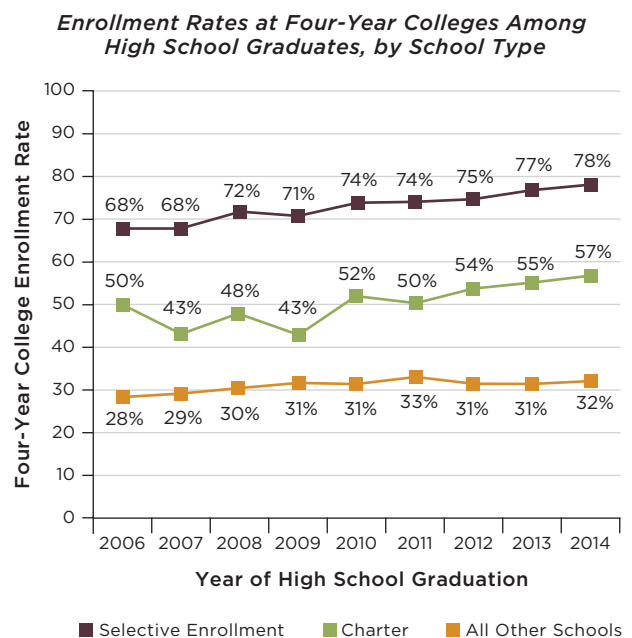
The pattern in four-year college enrollment is different; selective enrollment and charter schools have seen larger increases than other schools. The four-year college enrollment rate for selective enrollment graduates increased from 68 percent in 2006 to 78 percent in 2014 (see Figure 5). Among charter school graduates, the rate increased from a low of 43 percent in 2009 to 57 percent in 2014. The four-year college enrollment rates of all other schools have hovered around 31 percent for a number of years. However, with the increases in high school graduation rate in these schools, the relatively flat college enrollment rate represents an increase of 750 additional graduates of non-selective enrollment, non-charter schools enrolling in four-year colleges in 2014, compared to 2006.

FIGURE 4
The High School Graduation Rates at Non-Charter, Non-Selective Enrollment Schools Have Caught up to Charter Schools



Note: The "All Other Schools" category does not include alternative schools or special education schools.

FIGURE 5
The Four-Year College Enrollment Rate of Charter School Graduates Continues to Exceed That of Non-Charter, Non-Selective Enrollment School Graduates



Note: The "All Other Schools" category does not include alternative schools or special education schools.

19 The characteristics, especially prior achievement, of CPS students who attend selective enrollment schools (which require students to meet test score cut offs to be eligible to apply) differ from students who attend charter schools (which are open enrollment and must use a lottery if they

are over-subscribed) and non-selective, non-charter schools (some of which have selection criteria but many of which accept all students who apply). Two forthcoming Consortium reports examine these differences.

The number of charter school graduates who have had the time to graduate from a four-year college is small since many charter schools did not open until the late 2000s and it takes four years to have a graduating class and an additional six years to have college graduation outcomes for that class. Therefore, we do not display four-year college graduation rates by school type.

Conclusion

The improvements in the key milestones in educational attainment by CPS students are encouraging and represent real progress in the life outcomes of thousands of

young people in Chicago. The trends across school types suggest that creating a dialogue among selective enrollment, charter, and other high schools may be productive for increasing the educational attainment of students at all types of schools. However, in CPS and across the country, the percentage of ninth-graders that are estimated to attain a four-year college degree remains low. The efforts to improve educational attainment cannot be accomplished by K-12 systems alone; community partners and higher education also have a critical role to play in seeing real changes in educational attainment in Chicago.

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